

ILLINOIS ENGINEER

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS







Greetings

THE ILLINOIS ENGINEER
DECEMBER, 1959
VOLUME XXXV, NO. 12





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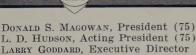


THE ILLINOIS ENGINEER

ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS, Incorporated

Affiliated with the National Society of Professional Engineers

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Illinois.

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SEASON'S REPORT

By L. D. HUDSON, ISPE Acting President

ISPE extends its heartiest greetings to each of you s it pauses to check its progress and peer into the 1960 uture.

Tear of Professional Interest.

The 1960 public relations program will spark an unusual year for developing the professional engineer. To ach Society member, this will bring the excitement of nergy directed to reinforce the ISPE program. The piggest challenge, however, will come to the competent non-member engineer who will see how technical stature can be expanded to professional stature through Society participation. This expansion is, in fact, the key to ISPE's operation.



LE VERNE D. HUDSON

Anniversary Exposition.

As a supplement to the state-wide participation by engineers in civic affairs, public attention to the value of engineers will be brought into focus by the Engineering Exposition to be held in Springfield by the Society May 4-8, inclusive, 1960. Particular attention will be given to ISPE because the Exposition will be held in celebration of its 75th Anniversary. The planned visitation program will assure an attendance of about 40,000 persons during the week. More about this will be found in this issue.

Planning and Sounding.

The changing pace of engineering practice requires that an organization be agile and adaptable. Each committee consequently finds that it must plan ahead while it concurrently makes its moves to solve the problems.

The Education Committee completed the Society's Engineers and Scientists Utilization Conference' held December 1 and 2, 1959, in Chicago at the Edgewater Beach Hotel. This was co-sponsored with Northwestern University. In addition, the Ethics and Practices Com-

mittee has been effective in the consideration of cases requiring attention. Among the highlights of the year have been the employment practice actions taken by men of the industrial areas; these were geared to orient engineers in large organizations in the coming role of ISPE for these groups. It can be seen clearly that the Society is better geared for action than it ever has been.

Editorially Speaking— "BE SELFLESS"

In this Season of Yuletide we should reflect upon the life and teachings of a Nazarene who lived 2,000 years ago. Whatever our faith, it is generally agreed that the truth of His teachings from a pure basic moral and ethical concept has stood the test of time. His entire life was devoted to uplifting and helping others without regard to His personal well-being.

In a recent sub-chapter organizational meeting in Chicago, a very sober and reflective statement was made which is worthy of repetition: "If we, as engineers, use an organization purely for selfish purposes, it is no good. We must approach the Society with an attitude of helping others. The entire public welfare must be the primary objective."

As we approach a New Year, Engineers and all individuals will gain great moral satisfaction by following the example of the Nazarene. Think first of others. Let the Public Welfare prevail in all matters. ISPE will grow in strength and stature by accepting the concept "BE SELFLESS".

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N.S.P.E. ACTIVITY SPELLS PROGRESS

The National Society of Professional Engineers, moving toward its goal of 60,000 members by 1960, gained its fifty-first state-level affiliate and its first student chapter at its annual fall professional meeting in Pittsburgh last month.

More than 300 directors and members were on hand to see Vermont become the Society's fifty-first affiliate at the opening night's dinner meeting in the Penn-Sheraton Hotel.

President Harold A. Mosher accepted the petition for affiliation of the Vermont Society of Professional Engineers from Paul R. Krauss, of Burlington, Vermont, a General Electric engineer who is the first president of the new society. After acceptance of the petition, Walter D. Emerson, a member of the engineering faculty at Norwich University, was seated as Vermont's national director.

Earlier, the University of Pittsburgh became the nation's first student chapter to become officially affiliated with the National Society. Victor J. Steigerwald, president of the chapter, accepted the charter from Mosher in ceremonies following the opening dinner.

In a speech following the presentation, J. Neils Thompson, chairman of the Society's Student Chapter Committee, described the student chapter program as "something that will pay big dividends in the long run. I hope this presentation here tonight is the forerunner of many such presentations," Thompson told the directors.

Later, President Mosher outlined a four-point program of activity for NSPE during 1960. He urged increased work by the Society in the areas of (1) membership; (2) public relations; (3) unity; (4) grassroots approach to the activity of the local, state and national levels of the Society.

In other action plans were announced for a broad survey of state civil service and merit system regulations relating to engineering personnel policies.

Details of the survey were outlined to the NSPE Board of Directors by Wesley E. Gilbertson, chairman of the Society's Functional Section for Engineers in Government Practice.

"The Functional Section believes such a study to be extremely meritorious in that it will serve to focus the attention on all areas of state engineering personnel administration so that more improved policies and higher standards will result," Gilbertson told the Board.

The survey, he said, will be carried out in cooperation with the functional sections of the state societies. Plans are also underway to extend the survey to include engineering personnel policies in the major municipalities.

NORTH SHORE CHAPTER HOLDS SUCCESSFUL "RECOGNITION NIGHT

North Shore Chapter President William J. O'Brid Jr., welcomed nine newly registered professional emneers to the Chapter Recognition Night Dinner on Lember 11 at the Naval Air Station Officers Club Glenview.

Guest speaker for this event was Richard D. Glease head of a nationally renowned Chicago firm of care planning consultants. Chapter members were also he ored by the presence at the dinner of Fred Trezz Enginering Dean of the Chicago Branch of the University of Illinois at Navy Pier.

National Director C. J. McLean talked briefly on thistory and growth of the Illinois Society of Profession Engineers and the National Society. Mr. McLean cit the purposes and goals of professional societies. He urge the newly registered engineers to become active member of their professional organization and their founder cieties.



Newly registered engineers of the North Shore Chapter:

Featured speaker Richard D. Gleason pointed of the importance of career planning for engineers. I stressed that such planning is needed by experience engineers as well as the honored guests who are just estarking on new careers. An apt comparison broug out by Mr. Gleason was that a career plan is like a roomap. In taking a trip it is necessary to: 1) Knowhere you are; 2) Know where you want to go; 3) I cide how to get there; and 4) Go!

As Chapter President Bill O'Brien put it, "Me Gleason is a professional man in his field and he gas us a lot of exceedingly good professional advice."

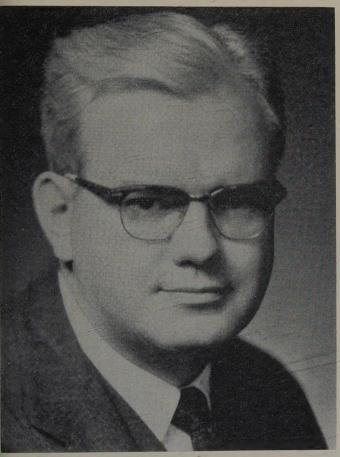
Happy Talk

Mr. Gleason's talk was titled, "Earn More and a Happier", but he emphasized at the outset that man people find that other factors are more important that money in assuring job happiness. He advised the ground against job-hopping just for the sake of increased it come. As a rule of thumb, Mr. Gleason recommended against changing jobs for money alone. He added the

usually å person ought not change at all unless a salary increase amounts to at least twenty-five percent.

In undertaking a "career-trip", it is necessary to first "Know where you are." Seven basic questions were posed by Mr. Gleason as aids to self appraisal of job satisfaction and satisfactory rate of advancement.

First, "Have you doubled your pay in the past seven years?" This is a general yardstick that Mr. Gleason used as a possible measure of realistic salary progress based on 10 percent increases each year on a compounded basis. He reminded the audience that such a rate was very nearly that which has been required to keep up with inflation.



RICHARD D. GLEASON

Second, "Have you been passed over for promotion more than twice?" Missing one promotion is not necessarily significant but the second or third "missed opportunity" should cause a man to examine his status and his prospects for the future.

Third, "Are you in a 'blind-alley' job?" Mr. Gleason pointed out that if there is simply no way up, the position must be classified as a blind alley. As an example, he said many purchasing agents were in such positions. This is true because these jobs were ends in themselves and were not normally looked upon as stepping stones to manufacturing management, the position which normally is above the purchasing agent.

Fourth, "Have you been in one position too long?" An often used rule of thumb is approximately four years. In this length of time it should be possible to analyze the prospects for the future in any position.

Fifth, "Do you like your work?" This is the largest single reason for job unhappiness. Usually it is symptomatic of the lack of adequate career planning. Too often we just "drift" into a job with no attempt at realistic analysis.

Sixth, "Is there a personality or policy conflict?" Personality conflicts with supervisors or with company policies lead to inefficiency and job unhappiness even if you are skilled and conscientious in your field.

Seventh, "Are you in a decadent industry?" It sometimes pays to examine this aspect to be sure that you aren't in a "blind-alley" industry that is withering on the vine after being by-passed in technological advances that are so numerous today. Such "buggy-whip factory" jobs offer no chance or proessional growth.

These seven basic questions are useful to the individual in self examination while deciding on the need for or the desirability of changing jobs.

In planning a career it is necessary to develop definite realistic objectives for the next twenty or twenty-five years. These objectives could be set at five year intervals as sort of mile posts in the "road-trip" analogy previously expressed. Mr. Gleason termed it far more important to know your way than to worry about staying too long at each spot.

For engineers Mr. Gleason outlined a hypothetical case based on the age level of the individual. If a man hoped to be president of his company he might reasonably expect to attain that goal between the ages of 50 and 55. He could then set a ladder-schedule such as this:

	Predicted
Expected Position	Age Range
Research Engineer	30-35
Research Supervisor	35-40
Director of Research	40-45
Vice-President of Engineering	45-50
Company President	50-55

Such a ladder could be developed for each individual and he can judge his progress regardless of his attained age at the time of his self-appraisal.

After setting up the "ladder" or "road-map" the next step is to take steps to keep up with the self-established schedule. This involves salesmanship—personal salesmanship.

Engineers have only one thing to sell—their minds. And, Mr. Gleason pointed out, very little has been done to help people sell their minds. This involves demonstrating and probing one's ability to solve particular problems. Such proof of ability is important in advanc-

ing in your current job just as it is in finding and landing a new position.

You must sell yourself as a salesman would sell a product. Keep the needs of the customer in mind and keep your personal progress plan pointed to the solution of his problems.

Be subtle. Keep the boss informed as to your successes, talents and abilities in an unobtrusive manner. This is important in planning for career advancement by way of promotion and salary increases.

If you decide, for any reason, to change to a different organization the slogan of Richard D. Gleason Associates makes a good motto: "Pick your Job and Land It!" In doing this, learn all you can about the new organization. Its business history, personnel, products, future plans, financial status,—all of these are important in judging an organization where you might spend the remainder of your professional career.

After learning the needs of the organization in which you are interested you must arrange to present your true worth. In effect, prepare a "Sales Manual on Yourself". Mr. Gleason was quick to caution against the use of a resume'. There is nothing very flattering about a resume'. It only gives the facts. None of your personality comes across in a mimeographed or planographed copy. Also, the man reading the "fact sheet" realizes that he is only one of many on a mailing list when he reads it.

A personal letter listing all of the things you can do is more effective.

If your letter of application results in an interview you should be prepared to discuss the company's needs as well as your ability to solve specific problems. Remember, too, that an interview should be a two-way street. You should learn as much from the company as possible about all aspects of policies and procedures that might affect you and your future job-happiness.

Plan a strong follow-up. Prove why you are the best man for the job. In discussing salary give a range, not a specific figure. If you ask a single figure you might short-change yourself because no employer will offer a higher figure. On the other hand, if your asking salary is too high you might price yourself out of an offer. If your price is high because you are worth it, you must be able to list your assets.

Have a positive reason for wanting to leave your previous position—never be negative. Be on the alert for trick questions from your prospective employer. Decide whether the short range aspect of the new company is good. Ask yourself if the job fits your long range outlook. With answers to these questions, after the following dignified procedure outlined, you should be able to judge desirability of your job offer.

In summarizing his theme, "Earn More and Be Happier," Mr. Gleason repeated these helpful hints: 1) Set

long term goals; 2) Learn about Job Requirement 3) Analyze yourself; 4) Conduct a dignified job can paign.

Mr. Gleason's discussion was a thoroughly practice approach to a problem that faces all engineers and was particularly fitting that he should talk on caree planning for Recognition Night. He closed with the statement that "There's plenty of room at the top by the atmosphere is rather rarified so you must be able prove your ability to reach it."

75 YEARS OF ENGINEERING PROGRESS

On the opposite page is a full sized reproductice of the Front Cover of the ISPE Exposition Brochum which is being mailed to prospective exhibitors. The Exposition Committee Chairman, Charles Marr, supported by a very competent group of committee members has outlined a very enthusiastic project designed to depict 75 Years of Engineering Progress.

The committee cordially invites, and urges that every Engineer in Illinois join in making this Milestone of Engineering and Industrial Expansion the biggest evem of 1960. An event that will appropriately usher in the Challenging Era of the 1960's — Truly the decade that will be the "break-through" period of the Age of Space

Each Engineer and every Chapter of ISPE can contribute to the success of the program by—

- 1—TELLING all friends and business associated about the Exposition and inviting them to attend and participate.
- 2—PLAN to attend individually or in groups or special trains and buses.
- 3—COORDINATE with school leaders to encourage a tour of the Exposition.
- 4—BE A BOOSTER of the Engineering Profession Take pride in being an Engineer and approach the furture with humility and a sense of responsibility that you have and will make great contributions to the Progress of Humanity.

WELCOME BACK!

Vail H. Moore, formerly with Warren & Van Praage Inc., Decatur, and more recently with Hazen, Sawyer & Hudson, at Detroit, Michigan, has moved back to Illinois. He has bought the equipment and records of the late Tracy A. Pitzen at Paxton but will operate the business under his own name. Five former Pitzen employees are in his staff office which is located at 101 West Ottawa Street, Paxton.

Mr. Moore held several offices in the Central Illinoise Chapter and was President of the Chapter in 1955. He plans to become affiliated with the Champaign County Chapter. the illinois society of professional engineers

INVITES YOU TO JOIN WITH OTHER DISTINGUISHED FIRMS IN ITS

DIAMOND JUBILEE EXPOSITION

may 4 through 8, 1960 state armory springfield, illinois

YOUNG ENGINEERS' PROGRAM SUCCESSFUL



Outside Chicago, DuKane Chapter had the largest group of newly registered engineers to attend a Recognition Dinner.

Shown with President Magowan is the group of 16 young engineers.

75TH ANNUAL I.S.P.E. CONVENTION

And DIAMOND JUBILEE EXPOSITION

SPRINGFIELD — MAY 4-8, 1960



LAKE COUNTY CHAPTER HONORS

Left to right: John Westberg, Don Manhard, Robert Smutney, William A. Rose. Back row, left to right: John A. Miks, Paul R. Schaffer, Arthur Nelson, Wayne S. Mitter.

ENGINEERING'S GREAT CHALLENGE . . .

THE 1960's!

RADIOLOGICAL HEALTH ASPECTS OF WATER SUPPLY

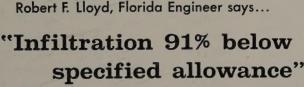
Radiological Health Aspects of Water Supply is the subject of the Second Sanitary Engineering Conference to be conducted jointly by the bureau of Public Water Supplies, Division of Sanitary Engineering, Illinois State Department of Public Health and the Department of Civil Engineering of the University of Illinois. This conference will be held on the campus of the University of Illinois in Urbana, on January 27 and 28, 1960. The First Sanitary Engineering Conference, held in January, 1959, was on Water Works Safety. Further information may be obtained from Mr. William J. Downer, Assistant Chief Sanitary Enginer, Department of Public Health, Springfield, Illinois, or from Dr. Ben B. Ewing, Associate Professor of Sanitary Engineering, Department of Civil Enginering, University of Illinois, Urbana, Illinois.

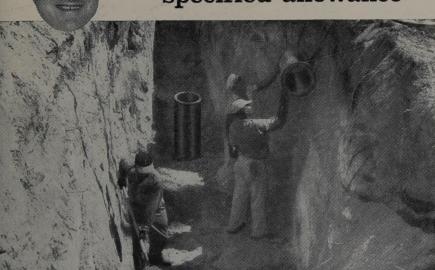
I.S.P.E. MEMBER PROMOTED BY MACOMBER STEEL

Organizational changes announced by Macomber Incorporated, Canton, Ohio, as a result of a recent Board of Directors' meeting include election of Charles R. Roberts as executive vice president of the firm and its subsidiaries (Roberts was formerly president of West Central Chapter); John W. King of the Columbus, Ohio, legal firm, George, Greek, King & McMahon, as vice president of finance and general counsel; Nicholas Petroff as treasurer; and J. W. Hubler to membership of the Board of Directors. (Mr. Hubler is a former officer of the Missouri Society of Professional Engineers.)

Roberts was formerly in charge of operations of the company's Rock Island Steel Division. Hubler is vice president of engineering of Macomber. He joined the firm in 1955 having previously served as consulting engineer for the Steel Joist Institute and as professor and Head of the Department of Civil Engineering at Washington University, St. Louis, Missouri.

Macomber manufactures structural steel and related products, including V-Lok interlocking framing members and the recently announced Allspan framing members, both of cold rollformed steel.





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ENGINEERS PART OF MANAGEMENT TEAM

One of many conclusions reached during a Utilization Conference for Scientists and Engineers at the Edgewater Beach Hotel in Chicago on December 1 and 2, was that Engineers, generally, fall into the classification of Management. Although many Engineers and few Executives recognize that both are on the same team, it is agreed that from the viewpoint of basic planning and ultimate objectives, Engineers and Administrators are working toward common goals.



One of the outstanding panels that participated in Utilization Conference. Left to right: Moderator, R. D. Maxson, Dr. Louis A. Turner, Dr. C. E. Barthel and J. F. Collins.

The conference was considered to be extremely successful in pointing out problems that exist in the proper Utilization of of Engineering and Scientific manpower. Very able panelists and speakers, representing Industry, Educational Institutions, and Government Agencies, were on the program which gave the conferees high quality presentation and productive discussions.

Because 50 percent of Engineering manpower is directly or indirectly affected, Government projects, it was advised that all Engineers have a community of interest in the affairs of State. Therefore, engineers should become conscience of public responsibilities and voice themselves through their Professional Engineer Society. Also Industry and Engineers have a mutual interest and greater cooperation should be established between the representative organizations to assure a minimization of problems relating to the best use of engineers and to get greater productivity from our economic and industrial system.

The conference was sponsored by the Northwestern Technological Institute and ISPE under the auspices of the Executive Office of the President, Office of Civil and Defense Mobilization.

A complete Report of the Proceedings will be printed early in January and sent to each participant. Those who did not attend the conference may order copies of the Conference Report at \$5.00 per copy. Address: Illinois Society of Professional Engineers, 817 Myers Building, Springfield, Illinois.

I.S.P.E. ELECTION IN JANUARY

A slate of officers to guide the affairs of ISPE was selected by the Nominating Committee, and the names were printed in the November issue of the Illinois Engineer. Members are reminded that election ballots will be mailed between January 7th and 15th, and each eligible member is urged to vote! Also a reminder iss given that prior to January 6, 1960, additional names for any office may be placed before the membership by a petition signed by not less than 50 corporate members.

Along with the officers' ballot, there will be an item relative to the ISPE Action Report of expanded activities within the society. To properly carry out the recommendations of the report as outlined in the September and October issues of the Illinois Engineer, the membership has been requested by the Board of Direction to vote a minor dues adjustment to assure the continued Expansion Program. An increase to \$13.00 National Dues became effective for January 1, 1960.

The new schedule which will become effective January 1, 1961, is as follows:

Manahamaham				
Membership Classification National	W	State \$12.00	National \$13.00	Total \$30.00
State	5.00	15.00		20.00
E. I. T	2.00	7.00	6.00	15.00
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Look for a thumbnail sketch of each nominee in the January issue of the Illinois Engineer.

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amy and of Company who Appeared During t	ne lear is Listed with Month of Last Appearance.
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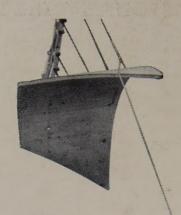
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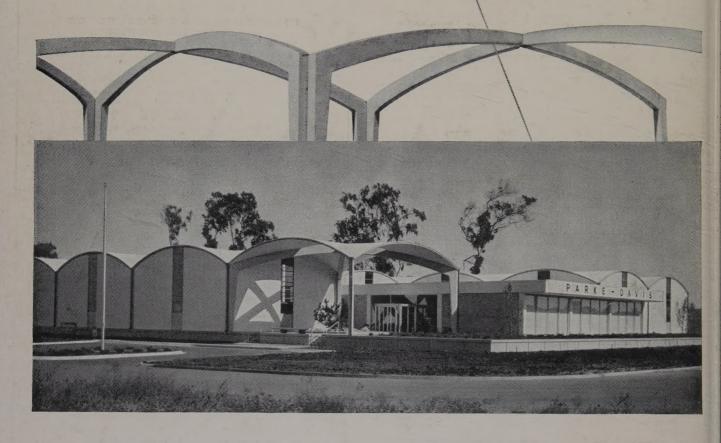
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